

FMCSA Specifications for Federal Procurements of Field Portable Computers and Peripherals

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This document provides specifications for FMCSA procurements of portable computer and peripheral hardware for field use. These specifications must be followed for all FMCSA procurements that meet the definitions below. The specifications in this document are updated two-to-four times per year and upon request.

If you have any questions regarding these specifications, please contact Jeff Hall or Robert Miller with the FMCSA Information Systems Division.

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FIELD LAPTOPS (Updated 11/20/2003)

This specification will be used for procuring laptops for use in conducting Compliance Reviews, Safety Audits, and Inspections. FMCSA no longer utilizes a separate specification for Inspection laptops. This is a three spindle laptop, with integrated harddrive, CD drive, and floppy drive.

- Panasonic ToughBook 50 CF-50BB2NUDM
 - Intel® Pentium® M Processor 1.6GHz w/ SpeedStep
 - 512MB SDRAM standard
 - 15" 1600 x 1200 (UXGA) TFT Active Matrix Color LCD
 - 60GB HDD (shock-mounted & easily removable)
 - 1.44MB FDD (integrated)
 - Combo DVD-ROM and CD-RW drive (integrated)
 - Electrostatic touchpad with vertical scrolling support
 - 56K modem (integrated) & 10/100 Ethernet card (integrated)
 - Two USB 2.0 ports & one IEEE 1394 (Firewire) port
 - 7.7 lbs, including battery, 1.85"(H) x 10.9"(D) x 12.8"(W)
 - Windows 2000 Operating System
 - 3 year warranty
 - Additional information:
<http://www.panasonic.com/computer/toughbook/pdf/CF50.pdf>



- Panasonic Accessories
 - Port Replicator CF-VEB501W
 - AC Adapter (for Port Replicator) CF-AA1653AM
- Additional Accessories
 - Optical Wheel Mouse with USB and PS/2 interface D66-00029

MANAGER LAPTOPS (Updated 11/20/2003)

This specification is for a lightweight laptop for use primarily for e-mail, scheduling, address book information, and minimal word processing. Although the specified unit can be used for much more, the trade-off for going with a lightweight unit is a decrease in ease-of-use. If a manager feels he/she will be running CAPRI, ASPEN, CaseRite, or performing a great deal of word processing, we recommend procuring the standard SI laptop.

- Panasonic Toughbook W2 CF-W2AWAZZDM
 - CPU - Ultra Low Voltage Intel® Pentium® M Processor 900MHz
 - Weight - 2.2 lbs
 - RAM - 256 MB (SDRAM)
 - HDD - 40 GB shock mounted
 - NIC - Integrated 56k modem and 10/100 network interface card
 - Wireless – Integrated Intel® PRO/Wireless 2100 (802.11b)
 - Optical Drive - Integrated Combo DVD-ROM/CD-RW Drive
 - Display - 12.1" 1024 x 768 XGA anti-glare TFT Active Matrix LCD
 - USB - Two 2.0 ports
 - PC Card – one type II
 - Keyboard/Mouse – 85 key, Electrostatic touchpad -vertical scrolling
 - Warranty - 3 year limited, parts & labor
 - Case - Full Magnesium Alloy Case
 - OS – Windows XP
 - Additional information:
http://www.panasonic.com/computer/toughbook/learn_more_tbw2.asp



- Panasonic W2 accessories (required to make this a complete solution)
 - 256 MB RAM upgrade (512 total) CF-BAT0256U
 - AC Adapter CF-AA1623AM
- Additional Accessories
 - Optical Wheel Mouse with USB and PS/2 interface D66-00029

PORTABLE PRINTER (Updated 11/20/2003)

This specification is to be used for both investigators and inspectors. Portable printers are procured and serviced for investigators and inspectors through the FMCSA Technical Support hotline.

- Canon BJC-85 * Q30-3210-US1
 - Speed: Up to 5 ppm in black / 2 ppm in color
 - Resolution*: 720 x 360 dpi for black
 - Compatibility: Windows® 95, 98, ME, NT 4.0, 2000, & CE 2.10/2.11
(*Note: This unit is not DOS compatible)
 - Wireless printing: Infrared port (fast IrDA)
 - Sheet feeder: 30 sheets, integrated
 - Interfaces include USB 1.0, IEEE 1284 parallel, and Fast IrDA
 - 3.1 lbs
 - Additional information:
<http://consumer.usa.canon.com/printers/bjc85/index.html>
 - Estimated price \$249



* The Canon i70 bubblejet printer is currently under evaluation.

** The HP 450 was determined to be too heavy for FMCSA field staff. However, it is a good printer.

4-IN-1 MULTI-FUNCTION PRINTER (Updated 11/20/2003)

This specification should be used when procuring an all-in-one device for telecommuters. This is a desktop printer, fax, and scanner. The unit specified is not portable. Cables are procured separately. 3-in-1 printers are procured and serviced locally.

- hp officejet 7130 C8389A
 - Color Print/Copy/Scan/Fax
 - Connectivity – USB, optional parallel cable adapter
 - RAM – 32 MB
 - Printer – Color inkjet, up to 22 ppm, 2400x1200 dpi resolution
 - Print Media – Paper (plain, inkjet, photo), envelopes, transparencies, labels, cards
 - Fax – 3 seconds per page, Color, 300x300 resolution, 100 page memory
 - Scanner – Flatbed, 1200x4800 dpi, 48 bit color
 - Scanner software – HP Director, HP Scan to Web Software, HP Creative Photo Projects, ReadIRIS OCR
 - Copier – Up to 18 pages per minute, digital
 - Weight – 32 lbs.
 - For additional information:
<http://h10010.www1.hp.com/wwpc/us/en/ho/WF06b/18972-238444-236260-12019-f6-91462-91467-91468.html>
 - Estimated street price \$499



PORTABLE SCANNER (Updated 06/10/2003)

This specification will be used when procuring portable scanners for use by investigators and inspectors.

- Visioneer Strobe XP 100 * 90-0493-500
 - Connectivity – USB
 - Resolution – 600x600 dpi
 - Scanner bit depth (color) – 36-bit
 - Power – Via USB, no separate power supply required
 - Weight – 10.6 oz
 - Dimensions – 1.5" x 2" x 11.4"
 - Software includes:
 - Document management – PaperPort Deluxe 8.0
 - OCR – TextBridge Pro 9 OCR
 - Image editor – ArcSoft PhotoImpression by Visioneer
 - OS – Win 98/ME/2000/XP
 - Additional information:
<http://www.visioneer.com/products/sheetfed/xp100/home.html>
 - Estimated price \$199



* The Strobe XP 200 is under evaluation. While the 200 does have minor enhancements, it is larger and heavier.

DIGITAL CAMERA (Updated 11/20/2003)

This specification will be used when procuring digital cameras for use by investigators and inspectors. A digital camera is an excellent tool for documenting violations such as a cracked trailer frame.

- Canon PowerShot S45
 - Resolution – 4 megapixel
 - Zoom – 3x optical
 - Lens – 35-105mm 35mm equivalent, F/2.8-F/4.9
 - Body – All metal
 - Lens cover – Sliding door built into body
 - Flash – Built in
 - Voice annotation
 - Battery – Lithium ion, rechargeable
 - Weight – 9.2 oz for camera body only
 - Connectivity – USB 1.1 (cable included)
 - Storage media – CompactFlash (CF) Type I or II
 - Software includes:
 - Drivers & Utilities
 - Canon PhotoStitch
 - Canon ZoomBrowser EX
 - ArcSoft PhotoImpression
 - ArcSoft VideoImpression
 - Canon ImageBrowser
 - Canon Remote Capture
 - PC Requirements:
 - Operating System – Windows 98, ME, 2000, XP
 - CPU – Pentium 150 or faster
 - RAM – 128 MB for XP, 64 MB for other OS
 - Additional information:
<http://www.powershot.com/powershot2/s45/index.html>
 - Estimated price - \$499



- Recommended accessories for digital camera
 - Lexar 128 MB 12x CompactFlash
 - Canon soft case (PSC-30)

* The Canon S50 is essentially the same camera with a 5 megapixel CCD. However, the S45 is a better value and has more than enough resolution with 4 megapixels.

PERSONAL DIGITAL ASSISTANT (PDA) (Updated 11/20/2003)

FMCSA has established three specifications for handheld computer devices. The first is for use by managers solely as a personal information management tool and is referred to as the "Manager PDA." The unit is small and lightweight, but lacks expandability. The second unit is for use by field personnel in conducting enforcement activities such as driver/vehicle inspections and is referred to as the "Field Activity PDA." This unit is somewhat larger, heavier and expensive, but is much more flexible, expandable, and has integrated wireless LAN connectivity. The third is for personnel that need a PDA with a built-in keyboard for more text entry. This is referred to as the "Expanded Manager PDA."

Manager PDA

- HP IPAQ Pocket PC h1940 * FA105A
 - Processor – Samsung S3C2410 - 266 MHz
 - Memory - 64 MB SDRAM (56 MB main), 13 MB iPAQ File Store
 - Operating system – MS Windows® Mobile™ 2003 Pro
 - Weight – 4.3 oz
 - Dimensions – 4.46 x 2.75 x .50 in
 - Expansion slot – One SD (supports SDIO & SD/MMC)
 - Display – Transflective 3.5" TFT liquid crystal display with LED backlight, 64K colors 16-bit, 240 x 320 resolution
 - Input type – Pen and touch
 - External input/output ports – Infrared Port (IrDA SIR), Cradle/Synch/Power Port, Audio Jack (2.5 mm)
 - Software – iPAQ Pocket PC Companion CD-ROM, Microsoft® Outlook 2000, Microsoft® ActiveSync 3.7, add-on software and applications, reference guide
 - Additional hardware included – USB synchronization cable, AC adapter, battery, charger adapter, 2.5mm - 3.5mm audio adapter
 - Warranty – 1 year
 - Additional information –
<http://h10010.www1.hp.com/wwpc/us/en/sm/WF06a/215348-64929-215381-314903-f42-322904.html>
 - Price approx. \$299



* Please note the h1940 is NOT compatible with standard IPAQ expansion sleeves. Use is limited to personal information management activities such as calendar, contact list, email, etc.

Field Activity PDA

- HP IPAQ Pocket PC h5550

FA107A

- Security – Integrated biometric fingerprint reader
- Wireless – integrated WLAN (802.11b), Bluetooth
- Processor – Intel® 400 MHz with XScale technology
- Memory – 128 MB SDRAM, 48 MB Flash ROM
- Operating System – MS Windows Mobile 2003
- Weight – 7.29 oz
- Dimensions – 3.3 x 0.63 x 5.43" (w/ LAN antenna)
- Expansion slot – One SD (supports SDIO, SD, & MMC)
- Display – Transflective TFT LCD, over 65K colors 16-bit, 240 x 320 resolution, 3.8" diagonal viewable image size
- Input type – Pen and touch
- Software – Companion CD, Calendar, Contacts, Task, Voice Recorder, Notes, Pocket Word, Pocket Excel, Pocket Internet Explorer, Windows Media Player 8, Calculator, Inbox, Microsoft Reader, File Explorer, MSN Messenger, Terminal Services Client, VPN Client
- Additional hardware included – USB Desktop cradle/charger, AC adapter, holster with belt clip, battery, charger adapter
- Additional information –
<http://h10010.www1.hp.com/wwpc/us/en/sm/WF06a/215348-64929-215381-314903-f44-322916.html>
- Price approx. \$649



* Please note the h5550 is fully compatible with standard IPAQ expansion sleeves. These sleeves provide additional functionality, including CompactFlash (CF) slots, PC Card slots, 1 or 2 dimensional bar code readers, network interface cards, GPS solutions, PowerPoint presentation solutions, and more.

Expanded Manager PDA

- HP IPAQ Pocket PC h4350 FA172A
 - Processor – Intel® 400 MHz processor with Xscale™ technology
 - Memory – 64 MB SDRAM, 32 MB ROM
 - Operating System – MS Windows Mobile 2003
 - Weight – 5.8 oz, including battery
 - Dimensions – 5.4 x 2.9 x .6 in.
 - Expansion slot – One SD (supports SDIO, SD, & MMC)
 - Display – Transflective 3.5" TFT liquid crystal display with LED backlight, 64K colors 16-bit, 240 x 320 resolution
 - Input type – Integrated keyboard with backlight, pen and touch
 - Software – MS Mobile™ 2003 for Pocket PC, Calendar, Contacts, Tasks, Voice Recorder, Notes, Pocket Word, Pocket Excel, Pocket Internet Explorer, Windows Media Player 9, Calculator, Jawbreaker, Inbox, Microsoft Reader, File Explorer, Pictures, Terminal Services Client, VPN Client, Infrared, ClearType Tuner
 - Additional hardware included – USB desktop cradle/charger, AC adapter, slip cover, stylus, battery, getting started poster, charger adapter
 - Warranty – One year parts and labor
 - Additional information –
<http://h10010.www1.hp.com/wwpc/us/en/sm/WF05a/215348-64929-215381-314903-f43-349051.html>
 - Price approx. \$499



DIGITAL PROJECTOR (Updated 11/26/2003)

This is a recommendation only. FMCSA does not limit procurements of digital projectors to the unit listed in this specification.

- Mitsubishi XD50U MINI-MITS
 - Lumens – 1500
 - Weight – 3.4 lbs
 - Resolution – XGA (1024x768) w/ SXGA compressed (1280x1024)
 - Contrast – 1500:1
 - Zoom/Focus – Manual zoom and focus
 - Picture size – 26" – 200"
 - Computer display compatibility – XGA, SXGA, SVGA, and VGA
 - Remote – Full projector control, wireless
 - Warranty – 3 year parts and labor
 - Other – CNET Editor's Choice winner
 - Additional information –

<http://www.mitsubishi-presentations.com/html/xd50u.htm>



* NOTE: The **HP mp3130** is also an excellent choice. It displays 1800 lumens and weighs 3.8 lbs. This unit stands on edge, placing the lens higher giving it a smaller footprint. However, the vertical position may make it more prone to falling over.

* NOTE 2: **Interlink Electronics Point Navigator Wireless Remote Control** is an excellent wireless remote for use with presentations. Adapter attaches to USB port and does not require additional software.



DC POWER ADAPTERS FOR PANASONIC (Updated 11/20/2003)

This specification will be used when procuring a DC power adaptor for Panasonic CF-48, 50, CF-72, and W2 laptop computers. This adapter will operate the laptop and charge the battery in an automobile.

- Lind 80 Watt Adapter for Panasonic laptop computers PA1555-655
 - Compatibility – CF18, CF29, CF48, CF50, CF72, CF73 & W2
 - Weight – 13 oz
 - Input Voltage – 11 to 16 Vdc
 - Input Noise Filter
 - Output Voltage 15.6 Vdc
 - Output Current 5.5 amps (max)
 - Connector MP205 R/A
 - Auto Input Cable 18 Inches
 - Output Cable 36 Inches
 - Internal Overtemperature Shut Down
 - Low Input Voltage Shut Down
 - High Input Voltage Shutdown
 - Automatic Shut Down Reset
 - Warranty – 3 year, covers electronics, cables and connectors
 - Additional information:
http://www.lindelectronics.com/cgi-bin/Store7/PerlShop.cgi!/ORDERID!/aaa/PA1555-655/dbx_gen_detail_product
 - Price appox. \$100



* Please note this adapter can not be used in the airline in-seat power systems. The air in-seat power systems are limited to an output of only 75 Watts.

LAPTOP CARRYING CASE (Updated 01/20/02)

Model unspecified, but should, at minimum, accommodate laptop, printer, and all accessories. Suggested manufacturers, include Tenba and Targus. Styles to consider include wheeled, over the shoulder portfolio, and backpack. Models to consider include:

Targus – Top-loading Air Universal	(\$ 99)
Targus – Port 2.1 Easyroller Case	(\$149)
Tenba – Tenba Computer Traveler	(\$170)

MEDIA TYPES (Updated 11/26/2003)

Recommended media types (floppy disk is no longer recommended, but continue to be serviceable):

- CD-RW – Re-writable CD format, 640 MB capacity.
- CD-R – Write-once CD format, 640 MB capacity.
- USB Flash Drives – Solid state drive, nonvolatile Compact Flash memory, plugs into USB port, Re-writable, recommended capacity 256 MB or higher. These drives may be used with any Windows 2000/XP computer with a USB 1 or 2 drive.
- SD card – Secure Digital card, solid state nonvolatile flash memory, high data transfer rate and low battery consumption, recommended capacity 256 MB or higher. An SD card is about the size of a postage stamp and weighs approximately two grams. The SD card is used by the HP IPAQ PDA for removable data storage.
- Compact Flash II card – CF cards are nonvolatile solid state flash memory cards approximately the size of a matchbook. Recommended capacity 256 MB or higher. CF cards are used by the Canon S45 digital camera for removable storage.

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